An Exploration into the Relationship between Social Capital and Mental Health of Inhabitants of Marginalised Areas of Kermanshah City

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ABSTRACT

Marginality or informal settlement is an important subject in urban issues that generates negative and destructive consequences for the mental health of those who reside in such areas. It is of such significance that is addressed in macro-policies of the Fifth Development Plan of Iran. Given the importance of marginality as a concerning issue, this paper explores the relationship between social capital and mental health of the inhabitants of marginalised areas of the city of Kermanshah using field method and survey technique. The statistical society includes all inhabitants of marginalised areas of Kermanshah city aged 18 years and older. A total of 384 individuals were examined as the sample using the Cochran formula. Results indicate that there are significant and positive relationships between the total social capital (P=0.34) and its various aspects, including social trust (P=0.40), social solidarity (P=0.32), social participation (P=0.37), social support (P=0.30) and social awareness (P=0.24), with mental health. Results from AMOS show that, in general, the effect of social capital as a dependent variable on the mental health of the youth living in the marginalised area is 0.48. Social capital is a main source of mental health among people living in marginal areas. A society that is rich in social capital can provide people with higher levels of social and health benefits by providing more social support for members, developing social participation and trust, and raising individual and social awareness.

Keywords: Kermanshah city, marginalised area, mental health, social capital

INTRODUCTION

In regard to the advancement of national objectives and ideals of the society, mental health is of remarkable significance in terms of saving on material and spiritual costs of society members. Results of recent research show that mental disorders are among the most important elements in the overall burden of diseases. It is predicted that by 2020, the share of mental and neurological disorders in the overall burden of diseases will increase by 50% and change the current share of 5.10% to 15%. Attention to mental health in every aspect of life, including personal, social, and career life, therefore, is remarkably important (Cheng, Kawakhi, Coakley, Schwartz, & Colditz, 2000).

Mental health is an important element of public health. This term is used to describe the level of psychological and emotional well-being and also to show absence of mental disorders. According to the World Health Organisation [WHO] (2011), there is no distinct definition for mental health, and cultural differences, personal evaluations, and rival specialised theories affect the way this term is defined.

Given the fact that in today's life, a major portion of different diseases (whether mental or physical) in developing countries is highly connected with social factors and models, the impacts of such models reveal their effectiveness for a long-term period. Issues, such as poverty, failure in education, living in rather-improper physical environments (such as marginalised areas), and a high level of insecurity in the society (such as violence and accidents), along with

factors like negative personal incidents, including parental separation, losing a job, or forced migration, are among social factors that significantly affect an individual's mental health. Any decrease in the mental health of society members will lead to a decrease in their performance, which, in turn, provokes fundamental problems, not only for the individual, but for society as well (Woolcock, 2001).

As mentioned earlier, living in improper physical environment, such as marginalised areas, is one of the factors that decrease individual mental health. Usually, marginalised residencies are made up of non-standard and strictly dense houses that are unhealthy, unstable, and socially inappropriate. From a cultural viewpoint, marginality is at the lowest level and includes both social and physical aspects. Marginalised areas are in undesirable conditions and are of low quality in terms of health and service installations and equipment. They lack the basic welfare facilities. Open and non-sanitary toilets, as well as an environment contaminated with waste and rubbish, generate an expedient context for different diseases. In winters, alleys become full of filth and mud and on-street water slants through these areas, which results in an increase in diseases and fatality of the children living there (Ladan & Rezghi, 2009).

Marginality is a feature in many developing countries, including Iran. With the explosive pace of urbanisation and the emergence of urbanisation patterns in Iran, a considerable portion of urban

spaces and residential areas were occupied by a phenomenon known as marginality or informal settlements, which are at a large extent in different cities. From the early decades of the current solar century and with the arrival of industry in Iran, social reforms and land reforms in rural communities, injection of oil revenues into cities, reduction on fatality and, eventually, the Islamic Revolution and the subsequent war, along with other factors, forced a large part of the rural population and work force to migrate to cities, resulting in the expansion of marginalisation.

Marginality or informal settlements is considered an important urban issue that has brought about negative and destructive consequences for the mental health of those living in such areas. As a result, this issue is explicitly addressed in macro-policies of the Fifth Development Plan of the country.

One of the factors linked with mental health of individuals is their social capital. The term 'social capital' is defined as the capitals people use to solve general problems. As an axiom, social capital is considered a solution to various social problems, such as poverty, crime, lagging economy, and a low-yielding government. Social capital is deeply connected to concepts such as civil society and social communications (Adam & Roncevic, 2003).

Social capital positively affects various aspects of physical and mental health. It boosts self-confidence, generates social support, helps individuals obtain resources, and serves as a shield against stressful events of life (Salazar, Wingood, Diclemente, Lang, & Harrington, 2004).

Patel believes that the role of social factors in mental health is considerably specified. Increased attention towards such social factors and their role in mental health in third-world countries coincides with the development of social capital and it creates social models of mental health (Harpham, Carant, & Rodriguez, 2003). Lynch and Kaplan define social capital as a type of capital accumulation and networks that create social solidarity, social commitment and, consequently, self-esteem and health in individuals (Iman, Hoseini Roudbati, 2008; Lahsaeizadeh & Moradi, 2007). Given these explanations, therefore, an exploration into the relationship between social capital and mental health in marginalised areas is fundamental and of great importance. In this regard, this paper seeks to examine the relationship between social capital and mental health of people who live in marginalised areas of City of Kermanshah as one of Iran's metropolises where nearly 25 to 30 percent of the population live in marginality in poor conditions.

Though in Iran, social capital as well as mental health has been studied in many respects, research that examines the relationship between these two variables is rarely conducted. Particularly, the issue of social capital and mental health in marginalized areas has been neglected and has not been addressed scientifically. This is while people living in marginal areas are always exposed to social and

psychological harm. Therefore, considering the lack of research in this regard, the relationship between these two variables is a fundamental and scientifically verifiable problem.

Literature Review

Nekoonam, Ahmadi and Abbasi Jari (2015) conducted a research titled "An Examination on the Impact of Social Capital (in-group and out-group) on Mental Health of university Students (subjects: students of Tabriz University)". The results of their research suggested that there was a significant relationship between social capital (in-group and out-group) and mental health, while there was a reverse meaningful relationship between social capital (in-group and out-group) and anxiety, social dysfunction, and depression. Results also indicated that there wasn't a significant relationship between social capital (in-group and out-group) and physical symptoms.

Razavizadeh, Noghati and Yousefi (2012) conducted a research titled "Relationship between Social Capital and Mental Health among Students of Ferdowsi University of Mashhad". The methodology included a survey and the sample consisted of 304 students of Ferdowsi University of Mashhad. The results showed that, although independent variables of trust, support, social relationships, self-esteem and mental health supportive behaviour did not have individual meaningful impact on anxiety and severe depression simultaneously, the impact of trust, support, and social relations on these two variables is significant.

Shoja, Nabavi, Kasaee and Bagheri Yazdi (2011) conducted a research titled "Factor Analysis of Social Capital and its Relationship with Mental Health of the Elderly of Tehran's 9th District". Results demonstrated that there was a relationship between social capital's elements of individual trust and social solidarity and support and mental health of the elderly. However, no meaningful relationship was observed between social capital's elements of social trust and association relations with mental health of the elderly.

Shakerinia (2010) conducted a research titled "Relationship between Social Capital and Significance of Life with Mental Health in Victims of Wife Abuse". Results suggested that there was a meaningful relationship between social capital, significance of life, and mental health of the women studied in this research. Moreover, step-by-step regression analysis showed that variables of social capital and significance of life managed to predict the mental health of the subjects.

Hamano et al. (2010) examined the relationship between social capital and mental health in a study using a multi-level approach. They realised that both types of social capital (cognitive and structural) can affect mental health at the neighbourhood level.

Malberg (2010) examined the relationship between social capital and mental health among Norwegian social clients. Results indicated that there was a positive correlation between the elements of bonding social capital, such as social

trust and trust, in social workers with mental health.

Another research on social capital and mental health was conducted by Harpham et al. (2003) titled "Mental Health and Social Capital". The sample consisted of 1168 individuals aged 15 to 25 years whose mental health was evaluated on a 20-point scale. Moreover, the variable of social capital was measured in cognitive and structural aspects. Results of this research showed that social capital affected individual mental health both in terms of its structural aspect (civil participation, membership and activity in official and unofficial organisations) and in terms of its cognitive aspect (trust, mutual relationships, norms).

In a research titled "How Much Can Social Capital Affect Health", Roose and Wu (1995) examined the relationship between social capital and health. According to the results and data analysis, they concluded that social capital (engagement in or exit from official and unofficial social networks, friends and individuals that one relies on in the time of sickness, having control over life, and trust) affects individual health more than human capital (social base, age, sex, income).

Theoretical Framework: Mental Health Theories

Freud believed that most of the people are, to different degrees, neurotic, and that mental health is an ideal, not a statistical norm. He believed that the first characteristics of mental health is self-awareness, which means anything that returns to (me) in the unconscious. Eventually, true self-awareness is not possible unless the person has managed to pass through the levels of sexual mental health successfully and is not over-fixated in either of these levels. A mentally healthy person uses defense mechanisms, such as altruism, humor, piety, and austerity (Corsini, 1999).

According to Glasser, everyone has an implicit identity through which they feel relative success or failure. In general, a healthy person, according to Glasser, is one who has the following characteristics:

1) He / She does not deny the reality and does not ignore painful situations through denial; rather, he/she faces such situations objectively.

2) He / She has a successful identity (e.g. loves and is loved). He / She feels valuable and others confirm this feeling of theirs.

3) He / She accepts the responsibility of their life and behaviour and acts accordingly. Responsibility is the perfect sign of mental health.

4) Their attention to long-term joys are more rational and in accordance with reality.

5) He / She emphasises the present and future not the past while their emphasis of future is a foresight not a fantasy.

Glaser's reality therapy is based on the three principles of acceptance, judgment, and responsibility. Any person who manages to realise these three principles is mentally healthy (Khodarahimi, 1995).

Maslow calls a healthy human 'self-actualised' and explains that those who seek to reach self-actualisation meet their low-level needs, such as physical needs, security, belonging, love, and respect. They are not psychotic or neurotic and do not have other pathological disorders. They are role models of maturity, wisdom, and health. They utilise all of their potentials and capabilities to reach self-actualisation. They know who they are, what they are, and where they are going (Schultz, 2012). Maslow proposes 13 clinical criteria for realisation of self-esteem and self-actualisation: 1) A good perception of reality, 2) ability to accept one's self, others, and nature, 3) ability to maintain will, 4) relative achievement in fundamental issues, 5) having freedom and enthusiasm for life, 6) increasing autonomy and resistance in formation of groups, 7) initiation in judgment and richness in motivation, 8) numerous experiences, 9) a good sense of identification with humanity, 10) improving relationships with others, 11) easement in accepting others, 12) developing creativity, and 13) mobility in the system of values (Ganji, 2000).

Frankel believes that a mentally healthy or self-transcending person has the following qualities: freedom and choice of action, accepts the responsibility of their life and fate, and is not affected by external forces. This type of person has found a meaning to their life, has conscious control over their life, goes beyond self-attention, and is attracted to external meanings. He / She has career commitment, has a specific mission, and is well aware of it. He / She also has the ability to give and receive love and, finally, thinks about the future and pays attention to their future goals and duties.

Skinner is an experimental psychologist and a key figure in the Behaviourist approach. He believes that the past experiences of individuals make them conditional and that all human behaviours are a function of environment. If we manage to consciously change the social environment and optimise it, we can create more desirable qualities in them.

In short, the mental health of a healthy person, according to Skinner, is equal to behaviours that are consistent with rules and regulations of the society in a way that the person receives positive reinforcements from the environment and others due to these behaviours (Corsini, 1999). Dragotis defines mental health as the ability to live with joy, productivity, and a trouble-free life, along with the absence of nine symptoms of mental illness, including depression, anxiety, aggression, physical illnesses caused by mental illnesses, obsessive-compulsive disorder, interpersonal sensitivity, phobia, paranoid, and schizophrenia (Dragotis, 1994).

Kawachi and Brekman believe that areas with a higher level of social capital have better access to social and health services. Besides, such areas have the capability to enforce a campaign against the government in protest to budget or to prevent closure of a school or a hospital. These areas can also create official pressure groups to make health organisations available to the public. During crisis, war, or drought, for

example, areas with in-group and out-group social capital are more able to protect their residents, support them, and provide them with health services (Kawachi & Brekman, 2000).

Social Capital Theories

James Coleman maintains that social capital is not a unitary entity and consists of several elements, all of which have two features in common. First, social capital lies in the structure of the active (both real and legal) relations and, second, social capital facilitates social activities (Tajbakhsh, 2005 as quoted by Moeinoddini, Sanatkhah, & Dadkhahfar, 2013).

James Coleman puts social capital in the company of executives in social structures. Coleman considers social capital as a testator in the relations between and within the executives in a society in that it benefits some and doesn't benefit others. Social capital is not a single unit but a spectrum of different units that have two common features. All include aspects of a social structure and they help certain executives present in the structure. The development of social capital is defined as the aspects of trustworthiness, obligations, and effective norms maintained by the participants in networks. It depends on the maintenance of progressing opportunities and resources. Coleman believes that the formation and destruction of social capital depends on the relationships within network groups. He also evaluated different aspects of social structures within different ideologies,

as well as the role of governmental aid frequency, in social capital development. Even though some scholars have revised it, Coleman's definition of social capital still excels recent sociological works (Salmani, Taghipour, Ramexanzadeh, & Jalili, 2010).

Putnam claims that participation in community, like official and unofficial networks of the society, is the core to the concept of social capital (Hashemianfar & Heidarkhani, 2012). He states that volunteering in a community, which has inherited an enormous social capital in form of norms of reciprocity and social participation networks, is better (Putnam, 2001). Social networks encourage people to work together and trust others, rather than isolate themselves for personal interest purposes (Tajbakhsh, 2005). Contrary to economic capital, social capital is a public commodity. That's probably why it is often undervalued and not much is done to increase its value. Putnam considers the following features for social capital as a locally-obtained social solidarity: 1) A dense set of local social organisations and networks; 2) High levels of civil commitment in local social networks; 3) Strong and positive local identity along with a sense of consistency and equality with local community members; 4) Generalised norms regarding trust and mutual contribution between local community members and whether they know each other in person or not; and 5) Civil participation networks are the embodiment of the previous successful cooperation which can serve as a cultural

model for future cooperation (Azkia & Ghafari, 2008 as quoted by Mohseni Tabrizi & Aghamohseni, 2010).

For Putnam, indicators of social capital include trust, norms, and social participation networks that improve the performance of society by facilitating actions (Hashemianfar & Heidarkhani, 2012).

In the 1980s, Bourdieu developed the concept of social capital, although this was less paid attention to as compared to other parts of his social theory (Field, 2003). One of the theoretical foundations of Bourdieu's sociology was to consider society as a multiplicity of social domains. Various forms of capital (economic, cultural, and social) are the main elements defining the positions and possibilities of different actors in each domain. For him, capitalists can manifest themselves in two basic forms: economic capital, which has the ability to convert to money and may be institutionalised in the form of ownership rights; social capital, which consists of social requirements (communication) and in certain conditions has the ability to convert to economic capital and may be institutionalised in the form of aristocracy or nobility (Majedi & Lahsaeezadeh, 2006).

Francis Fukuyama discusses social capital in an economic framework. He used the concept of social capital to compile a theory on social trust, which states that the power and performance of social capital in society depends on society members' commitment to common norms and values and their ability to overlook personal interests in favour of public good and prosperity (Mohseni Tabrizi & Aghahasani, 2010, p. 150).

Bert defined the structural split theory in order to conceptualise social capital. Structural split theory is based on interpersonal relationships between an individual and their colleagues in a social network, which automatically is of value for the society (Mohseni Tabrizi & Aghahasani, 2010). According to this theory, if an individual in a social network established a relationship with colleagues with whom he/she has none or little relationships, he/she will have optimised it. Thus, the reinforcement of split networks has advantages, such as rapid information evaluation, double bargaining power, and increased control over resources and outcomes (Cybert, Kraimer, & Linden, 2001).

Brian Turner believes that social capital can be considered a paradigm for the definition of differences in health and illness among social groups in the public health domain. For Turner, this domain of social capital discussions is rooted in classic theories, especially in Durkheim sociology. He defines social capital as a membership of individuals in official and unofficial groups, as well as official and unofficial institutions, degree of social cohesion, social solidarity, and social membership density in local groups, voluntary associations, mutual social ties, and social trust (Turner, 2003).

In societies where social ties are not at a desirable level due to different reasons and where people avoid rational social interactions, the formation and development

of social capital take place slowly. Therefore, a phenomenon called 'selfish individualism' grows in these societies, which leads to an increase in social solidarity. Decrease in social interactions causes social isolation to individuals. As a result, a sense of isolation and loneliness spreads in the society and, with the escalation of this situation, negative mental states emerge in individuals while their mental health decreases. He also proposes that high social capital is a means through which individuals are protected against mental illnesses because social investments create a supportive environment for them (Turner, 2003).

Theoretical and Empirical Framework of Research

This research uses various theories. However, only those theories that serve as the basis for the hypotheses form the theoretical framework of the research.

From Kawachi's and Berkman's viewpoint, areas with higher social capital have more access to social and health services. Besides, such areas have the capability to enforce a campaign against the government in protest to budget or to prevent closure of a school or a hospital. These areas can also create official pressure groups in order to make health organisations available to the public. During crisis, war, or drought, for example, areas with in-group and out-group social capital are more able to protect their residents, support them, and provide them with health services (Kawachi & Brekman, 2000).

Turner believes that, in societies where social ties are not at a desirable level due to different reasons and where people avoid rational social interactions, the formation and development of social capital take place slowly. Therefore, a phenomenon called 'selfish individualism' grows in these societies, which leads to an increase in social solidarity. Decrease in social interactions causes social isolation to individuals. As a result, a sense of isolation and loneliness spreads in the society and, with the escalation of this situation, negative mental states emerge in individuals while their mental health decreases. He also proposes that high social capital is a means through which individuals are protected against mental illnesses because social investments create a supportive environment for them (Turner, 2003).

Hamano et al. (2010) realised that both types of social capital (cognitive and structural) can affect mental health at the neighborhood level. Malberg and Himonan (2010) showed that there is a positive correlation between the elements of bonding social capital, such as social trust and trust in social worker, and mental health.

Roose and Wu (1995) demonstrated that social capital (engagement in or exit from official and unofficial social networks, friends and individuals who one relies on in the time of sickness and having control over life and trust) affects individual health more than human capital (social base, age, sex, income).

Hence, the main hypothesis is extracted from the above-mentioned theories and

research: There is a relationship between social capital and mental health.

Moreover, according to various theories, social capital in the current research is evaluated in terms of social trust (Bourdieu, Putnam, Coleman), social solidarity (Putnam), social participation (Putnam), social awareness (Bourdieu), and social support (Turner). Thus, the sub-hypotheses are stated as follows:

There is a relationship between social capital (social trust, social participation, social solidarity, social awareness and social support) and mental health.
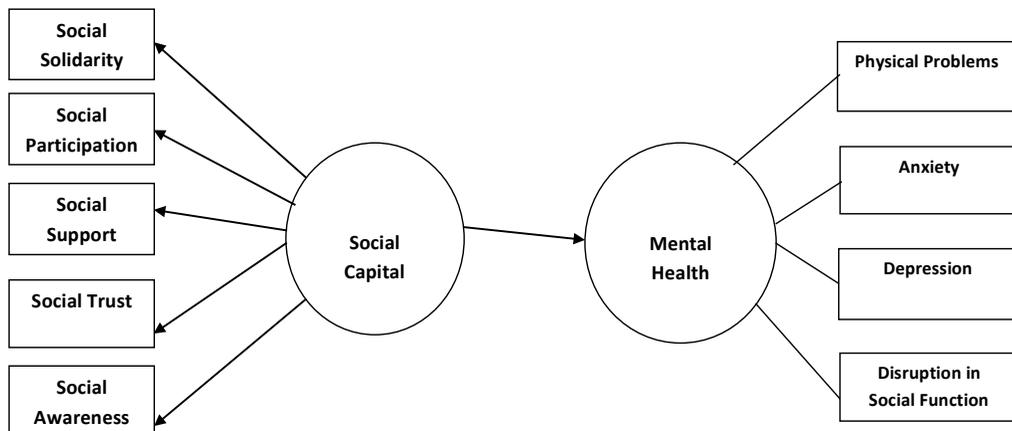

Figure 1. Theoretical model of research

RESEARCH HYPOTHESES

Main Hypothesis

There is a relationship between social capital and mental health of the individuals living in marginalised areas.

Sub-hypotheses

Hypothesis 1: There is a relationship between social solidarity and the mental health of people living in marginalised areas.

Hypothesis 2: There is a relationship between social participation and the mental health of people living in marginalised areas.

Hypothesis 3: There is a relationship between social support and the mental health of people living in marginalised areas.

Hypothesis 4: There is a relationship between social trust and the mental health of people living in marginalised areas.

Hypothesis 5: There is a relationship between social awareness and the mental health of people living in marginalised areas.

METHODS

Based on the data gathered and analysed, this research is a quantitative one and,

in regard to its manner of addressing the problem, it is a field study. The technique used in the research is survey. In the field study, Goldberg's standardised mental health questionnaire, as well as a researcher-made social capital questionnaire, was used to collect data. The General Health questionnaire (GHQ) was designed by Goldberg (Goldberg & William, 1979).

To verify the reliability of the questionnaire, several university instructors and experts were consulted, and the Cronbach's alpha test was used. Based on the alpha coefficient, the reliability coefficient of the mental health questionnaire is 0.83, while the reliability coefficient of the social capital questionnaire is 0.74.

The statistical population of this study consisted of all individuals aged 18 years and older in the marginalised areas of Kermanshah City. Since it was naturally impossible to study the opinions of all of the inhabitants of these areas, sampling was applied to determine the opinions of the subjects. According to the Cochran formula, a number of people (384 people) were selected and studied as the sample of the statistical population. The sampling method of this research consisted of two steps, including cluster sampling and simple random sampling. After data were collected, they were analysed using statistical software SPSS. Proper statistical tests were applied in accordance with each hypothesis to test them.

CONCEPTUAL AND OPERATIONAL DEFINITION OF VARIABLES

Social Capital

Conceptual definition: The term social capital refers to capitals, such as social trust and the norms and networks that people devote to solving general problems. Social capital is said to be linked with concepts, such as civil society and social communication (Adam & Ransowicz, 2003)

Operational definition: This research investigates social capital with indicators of social solidarity, social participation, social support, social trust, and social awareness.

Mental Health

Conceptual definition: Mental health is the ability to find a balance in life and resist problems. Psychological problems impose a considerable amount of pressure on communities (Fata, Mutabi, Shakikba, & Barouti, 2008).

Operational definition: This research investigates mental health with indicators of physical symptoms, anxiety, severe depression, and disruption in social function.

DATA ANALYSIS

Descriptive Statistics

Descriptive statistics included variables of sex, education and age. Results of the sex variable show that 54.0% of the respondents were male and 46.0% female. Results of

the variable of age indicate that 18.0% of the respondents were aged 15 to 18, 25.0% were aged 19 to 22, 30.0% were aged 23 to 26, and 24.0% were aged 27 to 29 years.

Results of the variable of education indicate that 28.0% of respondents have a diploma, 37.0% have an associate degree, 29.0% have a bachelor's degree, and 6.0% have a master's degree or higher.

Descriptive Statistics Regarding Mental Health Variable

Table 1
Descriptive statistics of mental health

Component status						Descriptive Indicators		Research Variables
Total	Very high (1)	High (2)	Average (3)	Low (4)	Very low (5)	Standard deviation	Mean	
384	69	77	70	83	85	0.91	3.09	symptoms of physical problems
384	49	90	80	90	75	0.87	3.13	anxiety
384	18	30	75	106	155	0.92	3.91	severe depression
384	34	59	85	100	106	0.88	3.48	disruption in social functions
384						0.90	3.40	Total mental health score

Findings of the mental health variable are in a way that the direction of the questions is the reverse. That is, the very high level of each variable indicates low mental health and its coefficient is 1, while the very low level of each variable indicates high mental health and its coefficient is 5. The findings showed that among the indicators of mental health, the mean of symptoms of physical problems is 3.91, anxiety is 3.13, severe depression is 91.3, and disruption in social function is 3.48. The overall mental health score of 3.40 indicates that the mental health of respondents is slightly higher than average.

Descriptive Statistics of the Social Capital Variable

Table 2
Descriptive statistics of social capital

Component status						Descriptive Indicators		Research Variables
Total	Very high (1)	High (2)	Average (3)	Low (4)	Very low (5)	Standard deviation	Mean	
384	42	73	140	97	32	0.97	2.99	social trust
384	74	101	138	31	40	0.87	3.35	social solidarity
384	48	60	129	85	62	0.94	2.86	social participation
384	39	60	121	94	70	0.93	2.75	social awareness
384	47	50	101	100	86	0.92	2.66	social support
							2.92	total social capital score

Unlike the findings of the mental health variable, whose indicators have a reverse direction, social capital indicators have a direct direction. This means that very high social capital is estimated with coefficient 5, while very low is estimated with 1. Findings show that among social capital indicators, social cohesion has the highest mean (3.35) while social support has the lowest mean (2.66). Moreover, the general status of social capital components shows that, in all of the components, respondents acknowledge that social capital in the marginalised areas of Kermanshah is less than average (3) while the total score of social capital indicates that social capital in marginalised areas is low and near average (2.92).

FINDINGS

Inferential Statistics

Normal Distribution of Data

To use parametric tests, some preconditions are required, which include normalised data. To investigate the normality of the factors, the Kolmogorov-Smirnov single sample test is used as follows.

H_o : data are normally distributed

H_1 : data are not normally distributed

Table 3
Kolmogorov-Smirnov test to determine the normality of research variables

Subscales indicators	Social trust	Social solidarity	Social participation	Social awareness	Social support
Kolmogorov-Smirnov values	2.65	2.92	2.88	2.63	2.36
Significance level (two domains)	0.21	0.25	0.07	0.08	0.13

According to Table 3, it can be concluded that, since the values of significance level of all research variables are more than 0.05, data are normally distributed and, thus, parametric tests may be used for the analysis of the research hypotheses.

Testing the hypotheses

There is a relationship between different aspects of social capital (social trust, social participation, social solidarity, social awareness, and social support) and mental health of those residing in marginality. The Pearson correlation coefficient test was used to investigate the research hypotheses regarding the relationship between different aspects of social capital (solidarity, participation, support, trust, and awareness) with mental health. Results are presented in the following table.

Table 4
Correlation between independent and dependent variables

| Variable | Indicators | Mental Health | |
		Correlation coefficient	Significance level
Social capital	Social solidarity	0.32	0.000
	Social participation	0.37	0.000
	Social support	0.30	0.000
	Social trust	0.40	0.001
	Social awareness	0.24	0.001
	Total social capital	0.34	0.000

Results suggest that there is a significant, positive, and direct relationship between all aspects of the social capital and mental health from the viewpoint of inhabitants of marginalised areas. Meanwhile, the relationship between social trust and mental health (P = 0.40) had the highest correlation coefficient, while the relationship between social awareness and mental health had the lowest correlation coefficient (P = 0.24).

Also, there is a positive and significant relationship between social participation (P = 0.37), social solidarity (P = 0.32), and social support (P = 0.30) with mental health from the perspective of the youth living in marginalised areas. Therefore, it can be argued that, from the perspective of inhabitants of marginalised regions, the higher the rate of social capital (P = 0.34) and its aspects, the higher the level of mental health. All the hypotheses of the present research are confirmed.

Regression analysis

How does each independent variable explain the dependent variables of the research?

Table 5
Multiple regression test

DW	F	R^2	R	Tol	VIF	sig	t	β	B	Predictive variables
1.89	21.84	0.36	0.60	-	-	0.000	2.95	-	1.734	Fixed value
				0.59	1.76	0.000	3.76	0.37	0.103	Social trust
				0.70	1.42	0.000	3.33	0.31	0.079	Social participation
				0.72	1.52	0.000	2.96	0.27	2.065	Social solidarity
				0.74	1.30	0.000	2.65	0.21	0.0244	Social support
				0.82	1.29	0.001	2.31	0.18	0.38	Social awareness

DW: Durbin-Watson, Tol: Tolerance, VIF: Variance inflation

Dependent variable: mental health of inhabitants of marginalised area

The table above lists the values of coefficients in the regression equation and probabilistic sizes based on the linear relationship between the predictive variables and dependent variables. According to the table, the social trust variable (β = 0/37) plays a larger role than other ones. This indicates that, for each unit of change in the standard deviation of social trust, a 0.37 change occurs in the standard deviation of the dependent variable. Subsequently, the social participation variable (β = 0.31), social solidarity variable (β = 0.27), social awareness variable (β = 0.21), and social interaction variable (β = 0 / 18) contributed to the prediction of the dependent variable.

It should be noted that multi-correlation of predictive variables with mental health is relatively high (R = 0.60). Also, five significant variables in general managed to significantly explain a change in the variable of mental health of inhabitants of marginalised regions by 0.36 (R2 = 0.36).

Structural Equation Model (AMOS)

A structural equation model was used to determine the intensity and direction of the effect of social capital on mental health among the inhabitants of marginalised areas of Kermanshah in different situations. Nine visible variables are present in this model, where the variables h1, h2, h3, h4, and h5 are representatives of the hidden variable of social capital, while the visible variables F1, F2, F3, and F4 are the representatives of the hidden variable of mental health. The error variables, z and d, represent the measurement error of the nine visible variables.

Table 6
Variable present in the model

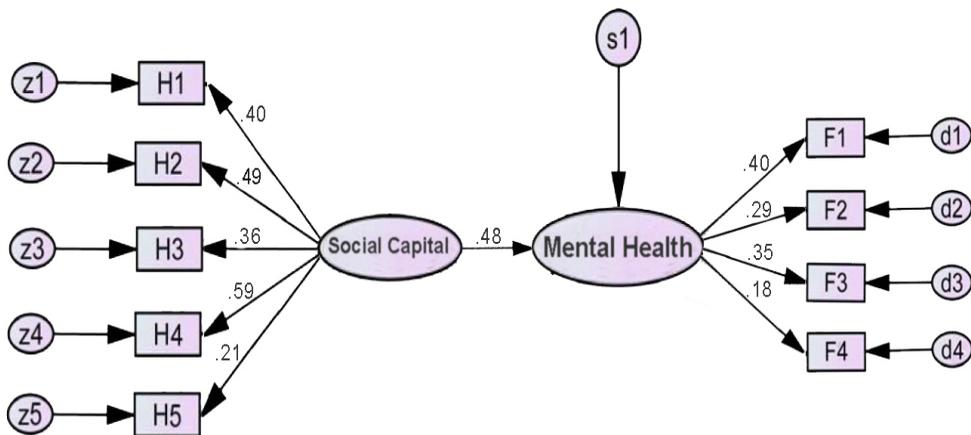| Variable	Indicators	Graphical symbols in the model
Social capital	Social solidarity	H1
	Social participation	H2
	Social support	H3
	Social trust	H4
	Social awareness	H5
Mental health	Anxiety	F1
	Severe depression	F2
	Symptoms of physical problems	F3
	Disruption in social function	F4

Figure 2. Structural equation test for the study of the impact of social capital on mental health

Given that the direction of the arrows from the hidden variable to the visible variable that represents the hidden variable, it indicates the methodological point that the score of each respondent in the visible variable is influenced by the situation of the respondent, where the hidden underlying variable is associated with the visible one. In this model, for example, the hidden variable is social capital and its visible indicator is social solidarity (H1). In other words, the weights of H1, H2, H3, H4, and H5 in the research model determine the amount of respondent's social capital.

In this model, the dependent and hidden variable is the mental health of the inhabitants of marginalised areas, while its visible indicators are anxiety (0.40), severe depression (0.26), symptoms of physical problems (0.35), and disruption in social function (0.18).

For example, the effect of the dependent variable of the research (e.g. mental health on F1 (0.40)) means that hidden variable

of mental health has the highest potential to analyse F1 (or items directly linked to anxiety) with the highest coefficient. Social trust has the highest potential to analyse this variable with a coefficient of 0.59 in the hidden variable of social capital. In general, the effect of the independent variable of social capital on the mental health of the inhabitants of marginalised areas is 0.48.

Model Fitness

Table 7
Model fitness indices

Indices	Value	Indices	Value	Indices	Value
CMIN	254.04	GFI	0.86	NNFI	0.80
ρ,df	0.000‹ 231	AGFI	0.81	NFI	0.83
CMIN/DF	12.74	CFI	0.79	RMSEA	0.62

Fitness indices were used to examine model fitness. Fitness indices yield statistical values that help researchers choose the most suitable model. There are many fitness indices; however, the most effective one is the basis for the other indices and is called χ^2. The closer the chi-square is to zero, the better the fitness of model. Since the chi-square value is influenced by the sample size and the number of relationships of the model, one cannot reach a desirable conclusion based on this value. Therefore, other indices are used along with this one to examine model fitness (Ezheie, Fata, Mutabi, Shakikba, & Barouti, 2008). Another index used to tackle this flaw of chi-square is χ^2/df. If this index is smaller than 3, it confirms the fitness of the model (Meyer, Eskandari, Grallath, & Rentsch, 2006). Based on the principle, Goodness of Fit Indices (GFI), Adjusted Goodness of Fit Index (AGFI), Confirmatory Factor Index (CFI), Normed Fit Index (NFI), and Non-Normed Fit Index (NNFI) are considered

90.0-95.0 for good models, while values higher than 8.0 indicate a rather good fitness of model. Also, if Root Mean Square Error of Approximation (RMSEA), suggested by Lohin (2004) for fitness, is less than 0.80, it shows good fitness, values of 0.80 to 0.1 show acceptable fitness, and values closer to zero indicate higher fitness. The above table shows the results of the analysis of the first-order factor for the above-mentioned model.

CONCLUSION

As mentioned before, mental health in the community is one of the main pillars of sustainable development and an essential part of prosperity and quality of life. A society is dynamic and vital only when its citizens, whether man or woman, enjoy favourable physical, mental, and social health. In this way, society can move towards improvement and fulfilment and reach a reasonable level of development. Mental health, especially in marginalised

areas or informal settlements, is one of the most important urban issues. Living in marginality generates negative and destructive consequences for the mental health of its inhabitants and, thus, this issue is address in macro-policies of Iranian Fifth Development Plan.

In this regard, given the importance and necessity of an examination of the relationship between social capital and mental health, this paper analysed and investigated different aspects of social capital (i.e. social trust, social solidarity, social participation, social support, and social awareness) as independent variables and their relationship to the mental health of the inhabitants of the marginalised areas of the city of Kermanshah as the dependent variable.

The results confirm a positive, direct, and significant relationship between all of the independent variables and the dependent variable. The higher the level of social trust (P = 40/0), social solidarity (P =32/0), social participation (P = 37/0), social support (P = 30/0), and social awareness (P = 24/0) among inhabitants of marginal areas, the more likely mental health is to be realised for them. Meanwhile, the highest correlation with mental health belongs to the variable of social trust, while the lowest correlation belongs to the variable of social consciousness.

The results of this study concerning the relationship between social capital and mental health are consistent with the findings by Hamano et al. (2010); Malberg (2010); Nekoonam et al. (2015); Razavizadeh et al. (2012); Shakerinia (2010), and Shoja (2011). The findings of all of above studies indicate that there is a relationship between various aspects of social capital and mental health. Also, the results of this article are consistent with Kavachi, Brackman and Turner theories. Each of the aforementioned theorists referred to the connection between social capital and mental health in their theories. Therefore, the findings of this research are completely in line with the above theories.

Based on the theoretical discussions and the findings of this research, it can be said that with the transition of societies from traditional to industrial, the mental health of the community becomes more important, so that mental health is at the forefront of the global organization, including the World Health Organization. This issue has been discussed in Iran as a developing country. In the meantime, the existence of a large part of the marginalized areas has caused problems. Issues and problems affecting the health of riders in marginal areas from different perspectives. Living in the marginalized areas requires the development of a spirit of trust, participation, support, coherence, engagement, and cooperation, according to their particular circumstances. The results of the research show that with the increase in each of these variables, the mental health of marginalized individuals also increases. Given that mental health means living in a situation where participation, trust, support and social interaction are integral to it, it provides safe and comfortable conditions, especially in marginalized areas with

multiple forms of deprivation in which one has the power to calm down and relax himself and others, is conscious of his inner self and emotions, has the power of decision-making in crisis, and can successfully cope with psychological pressures; this is in fact the meaning of mental health.

A rich society in terms of social capital can provide a higher level of health achievements through securing more social support, developing social participation and trust, and increasing individual and social awareness. Solidarity in a social network directly creates positive mental states and a sense of belonging in individuals which, in turn, improve their mental health. Moreover, those highly involved in social networks have access to broader social sources and are in more desirable conditions in terms of well-being. Social capital increases marginalised inhabitants' tendency towards interaction and cooperation with various social groups and creates a network of voluntary relationships among such groups in various aspects of social life. Social capital binds people together like a book end and prevents them from separation and scattering and, thus, secures their mental health.

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